

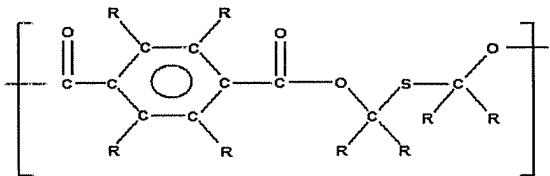
*Application Serial No. 10/614,340
Reply to Office Action of May 18, 2006*

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Withdrawn-Currently Amended) ~~An article~~The method of Claim 4, wherein the article comprising:
a substrate;
a permanent adhesive; and
~~a plurality of the flock fibers adhered by the permanent adhesive to the substrate, wherein the fibers comprise poly(cyclohexylene-dimethylene terephthalate), wherein the fibers are oriented transversely to the adjacent surface of the substrate, and wherein the fibers are heat set, and/or drawn at a temperature of at least about 180°C.~~
2. (Withdrawn-Currently Amended) The ~~article~~method of Claim 1, wherein the fibers are at least about 20% crystallized, wherein the fibers are ~~flock~~perpendicular to a plane of the substrate, and wherein the fibers are free standing.
3. (Withdrawn-Currently Amended) The ~~article~~method of Claim 1, wherein the substrate is a thermoplastic backing film and wherein the fibers are at least substantially normal to the substrate.
4. (Currently Amended) A method for forming an article, comprising:
providing a fiber-containing surface, wherein the fibers of the fiber-containing surface comprise at least about 25 wt.% of a terephthalate polymer or copolymer having a repeating unit having the formula:



where "R" represents hydrogen or independently a substituted or unsubstituted alkyl or aryl group and "S" is an aromatic or nonaromatic cyclic residue which can include one or more heteroatoms; and

sublimation printing the fiber-containing surface to form a printed article, wherein the fibers are at least one of drawn and heat set at a temperature at or above the maximum flockfiber temperature during sublimation printing.

5. (Currently Amended) The method of Claim 4, wherein the fibers are flock, wherein the polymer has a glass transition temperature of at least about 75 degrees Celsius, wherein the fibers are oriented transversely to an adhesive film contacting ends of the fibers, and wherein the fibers are free-standing.

6. (Previously Presented) The method of Claim 4, wherein the fibers have a percent elongation of at least about 25%, a compression recovery (from 34.5 mPa) of at least about 30%, and a deflection temperature at 18.8 kg/square cm of at least about 215 degrees Celsius.

7. (Previously Presented) The method of Claim 4, wherein the polymer is poly(cyclohexylene-dimethylene terephthalate).

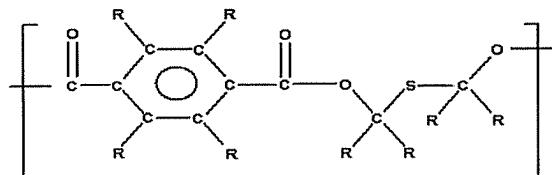
8. (Previously Presented) The method of Claim 4, wherein the fiber-containing surface comprises a release sheet, the plurality of fibers, and a release adhesive between the fibers and the release sheet.

9. (Previously Presented) The method of Claim 4, wherein the fiber-containing surface comprises the plurality of fibers adhered to a hot melt adhesive.

10. (Previously Presented) The method of Claim 4, wherein the fiber-containing surface comprises a plurality of fibers adhered to a thermoplastic backing film.

11. (Withdrawn-Currently Amended) A method for providing a molded article comprising:

providing a fiber-containing surface, the fiber-containing surface comprising a polymer that is at least one of a terephthalate polymer, poly(phenylene sulfide), liquid crystal polymer, and polyamide at least about 25 wt.% of a terephthalate polymer or copolymer having a repeating unit of the formula:

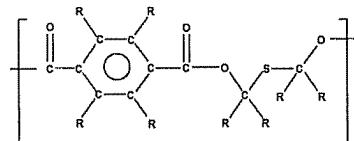


where "R" represents hydrogen or independently a substituted or unsubstituted alkyl or aryl group and "S" is an aromatic or nonaromatic cyclic residue which can include one or more heteroatoms;

sublimation printing the fiber-containing surface to form a printed article;
forming the printed article into a three dimensional shape;
positioning the formed printed article in a mold; and
introducing a resin into the mold to form a molded article, wherein fibers in the fiber-containing surface are at least one of drawn and heat set at a temperature at or above the maximum fiber temperature during sublimation printing.

12. (Withdrawn-Currently Amended) The method of Claim 11, wherein the fibers

~~comprise at least about 25 wt.% of a terephthalate polymer or copolymer having a repeating unit of the formula:~~



~~— where "R" represents hydrogen or independently a substituted or unsubstituted alkyl or aryl group and "S" is an aromatic or nonaromatic cyclic residue which can include one or more heteroatoms and wherein the flock has a melting point of at least about 200 degrees Celsius.~~

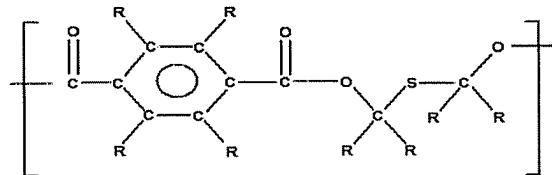
13. (Withdrawn) The method of Claim 12, wherein the polymer has a glass transition temperature of at least about 75 degrees Celsius, wherein the fibers are oriented transversely to an adhesive film contacting ends of the fibers, and wherein the fibers are free-standing.

14. (Withdrawn) The method of Claim 11, wherein the fibers have a percent elongation of at least about 25%, a compression recovery (from 34.5 mPa) of at least about 30%, and a deflection temperature at 18.8 kg/square cm of at least about 215 degrees Celsius.

15. (Withdrawn) The method of Claim 12, wherein the polymer is poly(cyclohexylene-dimethylene terephthalate).

16. (Withdrawn-Currently Amended) The method of Claim 11, wherein the fiber-containing surface comprises a release sheet, a plurality of flock fibers, and a release adhesive between the fibers and the release sheet.

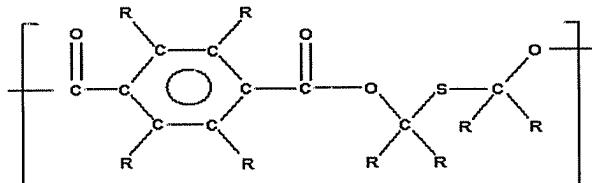
17. (Withdrawn-Currently Amended) The method of Claim 11, wherein the fiber-containing surface comprises a plurality of flock fibers adhered to a hot melt adhesive.



18. (Withdrawn-Currently Amended) The method of Claim 11, wherein the fiber-containing surface comprises a plurality of flock fibers adhered to a thermoplastic backing film.

19. (Withdrawn-Currently Amended) A method for forming a molded article, comprising:

providing a sublimation printed fiber-containing surface, the fiber-containing surface comprising a terephthalate polymer having a repeating unit of the formula:



where "R" represents hydrogen or independently a substituted or unsubstituted alkyl or aryl group and "S" is an aromatic or nonaromatic cyclic residue which can include one or more heteroatoms;

forming the fiber-containing surface into a three dimensional shape;

positioning the formed fiber-containing surface in a mold; and

introducing a resin into the mold to form a molded article.

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20. (Withdrawn) The method of Claim 11, wherein the fibers have a melting point of at least about 200 degrees Celsius.

21. (Withdrawn) The method of Claim 19, wherein the polymer has a glass transition temperature of at least about 75 degrees Celsius, wherein the fibers are oriented transversely to an adhesive film contacting ends of the fibers, and wherein the fibers are free-standing.

22. (Withdrawn) The method of Claim 19, wherein the fibers have a percent elongation of at least about 25%, a compression recovery (from 34.5 mPa) of at least about 30%, and a deflection temperature at 18.8 kg/square cm of at least about 215 degrees Celsius.

23. (Withdrawn) The method of Claim 19, wherein the polymer is poly(cyclohexylene-dimethylene terephthalate).

24. (Withdrawn-Currently Amended) The method of Claim 19, wherein the fibers are flock, wherein the fiber-containing surface comprises a release sheet, a plurality of fibers, and a release adhesive between the flock fibers and the release sheet.

25. (Withdrawn-Currently Amended) The method of Claim 19, wherein the fibers are flock and wherein the fiber-containing surface comprises a plurality of fibers adhered to a hot melt adhesive.

26. (Withdrawn-Currently Amended) The method of Claim 19, wherein the fibers are flock and wherein the fiber-containing surface comprises a plurality of fibers adhered to a thermoplastic backing film.

27. (Currently Amended) The method of Claim 4, wherein the fibers are flock and

wherein the fibers are heat set at a temperature at or above the maximum flock temperature during sublimation printing.

28. (Currently Amended) The method of Claim [[4]]27, wherein the fibers have a softening point at least about 5% greater than a maximum temperature of the flock during the sublimation printing step and wherein the maximum temperature is at least about 340°F.

29. (Currently Amended) The method of Claim [[4]]27, wherein the fibers have a melting point at least about 5% greater than a maximum temperature of the flock during the sublimation printing step and wherein the maximum temperature is at least about 340°F.

30. (Previously Presented) The method of Claim 4, wherein the fibers have a melting point of at least about 265°C.

31. (Previously Presented) The method of Claim 4, wherein the fibers have a shrinkage of less than about 1% in air at 190°C.

32. (Previously Presented) The method of Claim 4, wherein the fibers are at least about 30% crystallized.

33. (Previously Presented) The method of Claim 4, wherein at least one of a drawing temperature and heat set temperature of the flock is at least about 180°C.

34. (Currently Amended) The method of Claim [[4]]27, wherein the fiber-containing surface comprises a thermosetting adhesive, wherein, before the sublimation printing step, the thermosetting adhesive is not thermoset, and wherein the thermosetting adhesive is thermoset

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during the sublimation printing step.

35. (Currently Amended) The method of Claim [[4]]27, wherein the fiber-containing surface comprises a carrier sheet, a release adhesive engaging the carrier sheet and first ends of a plurality of fibers, and wherein second ends of the plurality of fibers are sublimation printed and further comprising:

thereafter applying a first permanent adhesive layer to the second ends of the plurality of flock fibers, the first ends being opposed to the second ends.

36. (Previously Presented) The method of Claim 35, further comprising:
applying a barrier film to a second surface of the first permanent adhesive layer, wherein a first surface of the permanent adhesive layer contacts the fibers and wherein the first and second adhesive layer surfaces are in an opposed relationship.

37. (Previously Presented) The method of Claim 36, further comprising:
applying a second permanent adhesive layer to a second surface of the barrier film, wherein a second surface of the barrier film contacts the first permanent adhesive layer and wherein the first and second barrier film surfaces are in an opposed relationship.

38. (Previously Presented) The method of Claim 4, wherein the fiber-containing surface comprises a carrier sheet, a sublimation dye on a first surface of the carrier sheet, a plurality of fibers, a release adhesive engaging the sublimation dye on the carrier sheet and first ends of the plurality of fibers, and a permanent adhesive engaging seconds ends of the fibers, wherein the first and second ends are in an opposing relationship.

39. (Previously Presented) The method of Claim 38, wherein the release adhesive vaporizes during the sublimation printing step.

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40. (Previously Presented) The method of Claim 4, wherein the fiber-containing surface comprises a carrier sheet, a plurality of fibers, and a release adhesive engaging the carrier sheet and fibers and further comprising:

contacting a permanent adhesive film with second ends of the fibers, first ends of the fibers engaging the release adhesive and the first and second ends being in an opposing relationship; and

laminating together the adhesive film and fiber-containing surface, wherein the contacting step is after the sublimation printing step.

41. (Previously Presented) The method of Claim 40, wherein the permanent adhesive film is at least one of a calendered, extruded, and co-extruded film, wherein the permanent adhesive film is a thermosetting adhesive, and wherein the permanent adhesive film is thermoset in the laminating step.

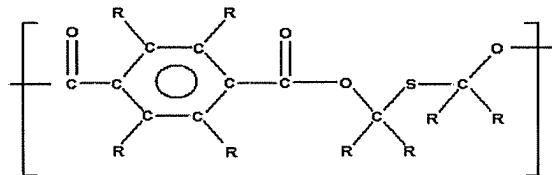
42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Withdrawn-Currently Amended) A method for providing a printed article comprising:

providing a fiber-containing surface having a plurality of fibers, the fibers comprising a polymer that is at least one of a polyester, a poly(phenylene sulfide), a liquid crystal polymer, and a polyamide at least about 25 wt.% of a terephthalate polymer or copolymer having a repeating unit of the formula:



where "R" represents hydrogen or independently a substituted or unsubstituted alkyl or aryl group and "S" is an aromatic or nonaromatic cyclic residue which can include one or more heteroatoms; and

sublimation printing the fiber-containing surface to form a printed article, wherein during sublimation printing the fiber-containing surface is heated to a sublimation printing temperature and wherein the polymer has a melting point greater than the maximum sublimation printing temperature, and wherein at least one of the drawing temperature and the heat set temperature of the polymer is at or above the maximum sublimation printing temperature.

46. (Withdrawn) The method of Claim 45, wherein the polymer is a polyester and is at least about 20% crystallized and wherein the polymer has a glass transition temperature of at least about 75°C.

47. (Withdrawn) The method of Claim 45, wherein the fibers have a softening point at least about 5% greater than a maximum sublimation printing temperature and wherein the maximum sublimation printing temperature is at least about 340°F.

48. (Withdrawn) The method of Claim 45, wherein the fibers have a melting point at least about 5% greater than a maximum sublimation printing temperature and wherein the maximum temperature is at least about 340°F.

49. (Withdrawn) The method of Claim 48, wherein the fibers have a melting point of at least about 200°C.

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50. (Withdrawn) The method of Claim 45, wherein the fibers have a shrinkage of less than about 1% in air at 190°C.

51. (Withdrawn) The method of Claim 45, wherein the fibers are at least about 30% crystallized.

52. (Withdrawn) The method of Claim 45, wherein at least one of an extrusion temperature, drawing temperature, and heat set temperature of the fibers is at least about 180°C.

53. (Withdrawn-Currently Amended) The method of Claim 45, wherein the fibers are flock, wherein the fiber-containing surface comprises a thermosetting adhesive, wherein, before the sublimation printing step, the thermosetting adhesive is not thermoset, and wherein the thermosetting adhesive is thermoset during the sublimation printing step.

54. (Withdrawn-Currently Amended) The method of Claim 45, wherein the fibers are flock, wherein the fiber-containing surface comprises a carrier sheet, a release adhesive engaging the carrier sheet and first ends of a plurality of fibers, and wherein second ends of the plurality of fibers are sublimation printed and further comprising:

thereafter applying a first permanent adhesive layer to the second ends of the plurality of fibers, the first ends being opposed to the second ends.

55. (Withdrawn) The method of Claim 54, further comprising:
applying a barrier film to a second surface of the first permanent adhesive layer, wherein a first surface of the permanent adhesive layer contacts the fibers and wherein the first and second adhesive layer surfaces are in an opposed relationship.

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56. (Withdrawn) The method of Claim 55, further comprising:

applying a second permanent adhesive layer to a second surface of the barrier film, wherein a second surface of the barrier film contacts the first permanent adhesive layer and wherein the first and second barrier film surfaces are in an opposed relationship.

57. (Withdrawn-Currently Amended) The method of Claim 45, wherein the fibers are flock, wherein the fiber-containing surface comprises a carrier sheet, a sublimation dye on a first surface of the carrier sheet, a plurality of fibers, a release adhesive engaging the sublimation dye on the carrier sheet and first ends of the plurality of fibers, and a permanent adhesive engaging seconds ends of the fibers, wherein the first and second ends are in an opposing relationship.

58. (Withdrawn-Currently Amended) The method of Claim 45, wherein the fibers are flock and wherein the fiber-containing surface comprises a carrier sheet, a plurality of fibers, and a release adhesive engaging the carrier sheet and fibers and further comprising:

contacting a permanent adhesive film with second ends of the fibers, first ends of the fibers engaging the release adhesive and the first and second ends being in an opposing relationship; and

laminating together the adhesive film and fiber-containing surface, wherein the contacting step is after the sublimation printing step.

59. (Withdrawn) The method of Claim 58, wherein the permanent adhesive film is at least one of a calendered, extruded, and co-extruded film, wherein the permanent adhesive film is a thermosetting adhesive, and wherein the permanent adhesive film is thermoset in the laminating step.

60. (Withdrawn) The method of Claim 45, wherein the sublimation printing temperature is at least about 340°F.

61. (Withdrawn) The method of Claim 4, wherein the fibers are flock.

62. (Withdrawn) The method of Claim 4, wherein the sublimation printing step comprises:

contacting a transfer, comprising sublimation dye, with the fiber-containing surface; and
heating and applying pressure to the contacted transfer, whereby sublimation dye is transferred from the transfer to the fibers.

63. (Withdrawn) The method of Claim 11, wherein the polymer is a polyester and wherein the sublimation printing step comprises:

contacting a transfer, comprising sublimation dye, with the fiber-containing surface; and
heating and applying pressure to the contacted transfer, whereby sublimation dye is transferred from the transfer to the fibers.

64. (Withdrawn) The method of Claim 19, wherein the sublimation printing step comprises:

contacting a transfer, comprising sublimation dye, with the fiber-containing surface; and
heating and applying pressure to the contacted transfer, whereby sublimation dye is transferred from the transfer to the fibers.

65. (Withdrawn) The method of Claim 45, wherein the polymer is a polyester and wherein the sublimation printing step comprises:

contacting a transfer, comprising sublimation dye, with the fiber-containing surface;
heating and applying pressure to the contacted transfer, whereby sublimation dye is transferred from the transfer to the fibers.